9 July 1953

Dr. Joshua Lederberg
Department of Genetics
College of Agriculture
University of Wisconsin
Madison, Wisconsin.

Dear Dr. Lederberg:

Thank-you for your letter. Your interest and help have been a considerable source of encouragement. I am very sorry it has not been possible for me to work in your laboratory.

Thus far we have sent you no cultures. The ones you received must have been sent by someone else.

Enclosed is a copy of the revised manuscript that was sent to the Journal of Bacteriology one week ago. As you will readily see we have made marked changes in the manner of presentation, but practically no change in the basic information. You may wonder why so little has been done since the last draft was submitted. First of all we have devoted a great deal of time to the experiments we did with Cohen on phage which he presented at the Cold Spring Harbor Symposium. Also we have just finished a manuscript on the new nucleotide and a new polynucleotide from phage. In addition it has been possible to make great strides in the preparation of volumes in basic science for medical officers, and we even launched into an experiment of developing and recording discussions on various medical problems to send off the boys stuck in the woods.

However, do not feel that we have forgotten the copper bug. We are convinced from preliminary data that analysis of the proteins and DNA has a great deal of crucial information to offer. And indeed I shall continue working on it by hook or crook no matter where I am. In regard to the classical genetic approach, on the other hand, I have or will have neither the training or the time to do anything. We should like very much to have you explore as much as you can. It is necessary for me to leave here immediately, but arrangements have been made to send you plates of the organisms. Your strain must be different. We have never failed to acheive the result when using the conditions stated.

We sent our organisms to Ewing for typing and he said they were too rough to type. Thus all I know about it is that it came from Cohen, is a coli biochemically and is hit by the T phages.

You may wonder why there is still no "per cell" data in the paper. We have done a good deal of work in that reagrd and have correlations between direct and plate counts that are always within 5-10% for the normal organism. However, accuracy within 5% for the "copper" organism could not be consistently obtained so we left it out instead of giving approximate data. I discussed this matter with D.D. Woods and Monod before deciding it was best to do it this way. There is little doubt under any circumstances that the "copper" organism" is smaller, and we can talk about some day when we can say just how much so.

The approach hinted at in Figure 2 will, we feel, yield a great deal when time allows for the logical experiments to be carried out involving the isotopic labeling and isolation of the DNA at various points along the curve. This will eventually be done using methods described by Dr. Wilson and myself in a recent J.B.C paper.

We of course do not know how the Jour of Bact will respond to this paper, but whatever they say our course is well set. If you can verify our findings and work out the genetic aspects while we pursue the chemistry of the DNA and the virus aspects, it makes little difference, it seems to me, what they do or do not think. I have a couple more papers to work on for the J.B.C. so it would be a long time indeed before I would launch into another revision of this manuscript.

My address in Baltimore wil be: 808 North Broadway, Baltimore, Maryland. I shall be upt to my ears in learning the practice of medicine again, but never too busy or far from research to read with great interest any comments you can find time to send on. My correspondence with you has been a source of great pleasure and profit and I hope it continues.

Sincerely yours,

Lawrence L. Weed.

Lawrence L. Weed.

P.S. The enclosed manuscript is my only copy. I would appreciate your returning it to the Baltimore address before the autumn.

L. L. W.